	I	Aeronautics Educa	tor Guide	
	2008 Mathematics			
A. I. B. (I. (1)		Grade Level Artice	ulations	
Arizona Mathematics				
Grade 2 Activity/Lesson	State	Standards		
Activity/Lesson	State	Standards	Apply measurement skills to measure the	
Air Engines (12-16)	AZ	MA.2.4.4.PO 2	attributes of an object (length, capacity, weight).	
7gcc (:_ :c)			Collect, record, organize, and display data using	
			pictographs, frequency tables, or single bar	
Rotor Motor (69-75)	AZ	MA.2.2.1.PO 1	graphs.	
			Formulate and answer questions by interpreting	
Dotor Motor (60.75)	^7	MA 2 2 1 DO 2	displays of data, including pictographs,	
Rotor Motor (69-75)	AZ	MA.2.2.1.PO 2	frequency tables, or single bar graphs.	
Flight: Interdisciplinary			Count forward to 1000 and backward from 1000	
Learning Activities (76-			by 1s, 10s, and 100s using different starting	
79)	AZ	MA.2.1.1.PO 2	points.	
Flight: Interdisciplinary			11 115 1 100	
Learning Activities (76-		MA.2.1.1.PO 3	Identify numbers which are 100 more or less	
79)	AZ	IVIA.2.1.1.PU 3	than a given number to 900.	
Flight: Interdisciplinary			Collect, record, organize, and display data using	
Learning Activities (76-			pictographs, frequency tables, or single bar	
79)	AZ	MA.2.2.1.PO 1	graphs.	
Flight: Interdisciplinary			Formulate and answer questions by interpreting	
Learning Activities (76-	AZ	MA.2.2.1.PO 2	displays of data, including pictographs,	
79)	AZ	IVIA.2.2.1.PU 2	frequency tables, or single bar graphs.	
Flight: Interdisciplinary				
Learning Activities (76-				
79)	AZ	MA.2.2.3.PO 1	List all possibilities in counting situations.	
			Collect, record, organize, and display data using	
Dunked Napkin (17-	. 7	MA 0 0 4 DO 4	pictographs, frequency tables, or single bar	
22)	AZ	MA.2.2.1.PO 1	graphs.	
Dunked Napkin (17-			Formulate and answer questions by interpreting displays of data, including pictographs,	
22)	AZ	MA.2.2.1.PO 2	frequency tables, or single bar graphs.	
Paper Bag Mask (23-	_		Identify, with justification, whether a 2-	
28)	AZ	MA.2.4.2.PO 1	dimensional figure has lines of symmetry.	
Paper Bag Mask (23-			Apply measurement skills to measure the	
28)	AZ	MA.2.4.4.PO 2	attributes of an object (length, capacity, weight).	
Wind in Vous Scales			Collect, record, organize, and display data using	
Wind in Your Socks) (29-35)	AZ	MA.2.2.1.PO 1	pictographs, frequency tables, or single bar graphs.	
(20-00)	, ~_	IVIA.Z.Z. 1.1 O 1	Formulate and answer questions by interpreting	
Wind in Your Socks)			displays of data, including pictographs,	
(29-35)	AZ	MA.2.2.1.PO 2	frequency tables, or single bar graphs.	
Wind in Your Socks)			Apply measurement skills to measure the	
(29-35)	AZ	MA.2.4.4.PO 2	attributes of an object (length, capacity, weight).	

			Apply measurement skills to measure the
Right Flight (52-59)	AZ	MA.2.4.4.PO 2	attributes of an object (length, capacity, weight).
Delta Wing Glider (60-			Apply measurement skills to measure the
68)	AZ	MA.2.4.4.PO 2	attributes of an object (length, capacity, weight).
		Aeronautics Educate	
		2008 Mathemat	
		Grade Level Articul	ations
Arizona Mathematics			
Grade 3	0.1	04 1 1	
Activity/Lesson	State	Standards	
			A mining and a superior of a little to the angle of the manufactor of the superior of the supe
Air Engines (12.16)	A 7	MA 2 4 4 DO 2	Apply measurement skills to measure length,
Air Engines (12-16)	AZ	MA.3.4.4.PO 2	weight, and capacity using US Customary units.
Air Engines (12.16)	A 7	MA 2 4 4 DO 2 a	Convert units of length, weight, and capacity
Air Engines (12-16)	AZ	IVIA.3.4.4.PU 3.a	(inches or feet to yards,)
			Collect, record, organize, and display data using frequency tables, single bar graphs, or single
Dotor Motor (60.75)	A 7	MA 2 2 1 DO 1	
Rotor Motor (69-75)	AZ	MA.3.2.1.PO 1	line graphs.
			Formulate and answer questions by interpreting and analyzing displays of data, including
			frequency tables, single bar graphs, or single
Poter Meter (60.75)	AZ	MA.3.2.1.PO 2	line graphs.
Rotor Motor (69-75)	AZ	IVIA.3.2.1.FU Z	illie grapris.
Flight: Interdisciplinary			Collect, record, organize, and display data using
Learning Activities (76-			frequency tables, single bar graphs, or single
79)	AZ	MA.3.2.1.PO 1	line graphs.
10)	/ 12	1717 (. 0 . 2 . 1 . 1 0 1	Formulate and answer questions by interpreting
Flight: Interdisciplinary			and analyzing displays of data, including
Learning Activities (76-			frequency tables, single bar graphs, or single
79)	AZ	MA.3.2.1.PO 2	line graphs.
,			- 3 - 1
Flight: Interdisciplinary			
Learning Activities (76-			Determine elapsed time by hours and half hours
79)	AZ	MA.3.4.4.PO 1.b	using a clock
			Collect, record, organize, and display data using
Making Time Fly (80-			frequency tables, single bar graphs, or single
86)	AZ	MA.3.2.1.PO 1	line graphs.
			Formulate and answer questions by interpreting
Where is North? The			and analyzing displays of data, including
Compass Can Tell Us			frequency tables, single bar graphs, or single
(87-90)	AZ	MA.3.2.1.PO 2	line graphs.
Plan to Fly There (97-	1		Determine elapsed time by hours and half hours
106)	AZ	MA.3.4.4.PO 1.b	using a clock
We Can Fly, You and			
I: Interdisciplinary			Determine elapsed time by hours and half hours
Learning (107-108)	AZ	MA.3.4.4.PO 1.b	
We Can Fly, You and			Make and test conjectures based on data (or
I: Interdisciplinary		NA 0 = 0 DO 0	information) collected from explorations and
Learning (107-108)	AZ	MA.3.5.2.PO 8	experiments.
Dundrad New Lit. 7.47			Collect, record, organize, and display data using
Dunked Napkin (17-	47	MA 2 2 4 DO 4	frequency tables, single bar graphs, or single
22)	AZ	MA.3.2.1.PO 1	line graphs.

Air Engines (12-16)	AZ	MA.4.4.PO 2	Apply measurement skills to measure length, mass, and capacity using metric units.
Activity/Lesson	State	Standards	Apply measurement skills to measure length
Grade 4	State	Standarda	
Arizona Mathematics	6		
		Grade Level Articu	lations
		2008 Mathemat	ics
		Aeronautics Educate	│ or Guide
(29-35)	AZ	MA.3.5.2.PO 8	experiments.
Wind in Your Socks)	A 7	MA 0.5 0.50 0	information) collected from explorations and
(20 00)	,	10.7 1.3.0.2.1	Make and test conjectures based on data (or
(29-35)	AZ	MA.3.5.2.PO 6	reasoning, and draw conclusions.
(29-35) Wind in Your Socks)	AZ.	IVIA.3.4.4.PU 3.a	(inches or feet to yards,) Summarize mathematical information, explain
Wind in Your Socks)	AZ	MA 3 4 4 DO 3 a	Convert units of length, weight, and capacity
(29-35)	AZ	MA.3.4.4.PO 2	weight, and capacity using US Customary units.
Wind in Your Socks)		MA 0 / / D0 5	Apply measurement skills to measure length,
Wind in Your Socks) (29-35)	AZ	MA.3.2.1.PO 2	and analyzing displays of data, including frequency tables, single bar graphs, or single line graphs.
Wind in Your Socks) (29-35)	AZ	MA.3.2.1.PO 1	frequency tables, single bar graphs, or single line graphs. Formulate and answer questions by interpreting
,	,	IVII 1.0.T.T.I O 0.0	Collect, record, organize, and display data using
Paper Bag Mask (23-28)	AZ	MA 3 4 4 PO 3 a	Convert units of length, weight, and capacity (inches or feet to yards,)
Paper Bag Mask (23- 28)	AZ	MA.3.4.4.PO 2	Apply measurement skills to measure length, weight, and capacity using US Customary units.
Paper Bag Mask (23- 28)	AZ	MA.3.4.2.PO 2	Identify, with justification, all lines of symmetry in a 2-dimensional figure.
28)	AZ	MA.3.4.2.PO 1	model its effect on a 2-dimensional figure.
28) Paper Bag Mask (23-	AZ	MA.3.4.1.PO 4	three-dimensional figures. Identify a translation, reflection, or rotation and
Paper Bag Mask (23-			Describe and compare attributes of two- and
Paper Bag Mask (23- 28)	AZ	MA.3.4.1.PO 1	Describe sequences of 2-dimensional figures created by increasing the number of sides, changing size, or changing orientation.
Dunked Napkin (17-22)	AZ	MA.3.5.2.PO 8	information) collected from explorations and experiments.
Dunked Napkin (17- 22)	AZ	MA.3.2.3.PO 1	systematic lists; draw conclusions from these representations. Make and test conjectures based on data (or
Dunka d Namkin / 47			Represent all possibilities for a variety of counting problems using arrays, charts, and
Dunked Napkin (17- 22)	AZ	MA.3.2.1.PO 2	frequency tables, single bar graphs, or single line graphs.
			Formulate and answer questions by interpreting and analyzing displays of data, including

			Collect, record, organize, and display data using
D . M . (00.75)	. 7	NA 4 0 4 DO 4	double bar graphs, single line graphs, or circle
Rotor Motor (69-75)	AZ	MA.4.2.1.PO 1	graphs.
			Formulate and answer questions by interpreting
			and analyzing displays of data, including double
Rotor Motor (69-75)	AZ	MA.4.2.1.PO 2	bar graphs, single line graphs, or circle graphs.
Flight: Interdisciplinary			Collect, record, organize, and display data using
Learning Activities (76-		MA 4 0 4 DO 4	double bar graphs, single line graphs, or circle
79)	AZ	MA.4.2.1.PO 1	graphs.
Flight: Interdisciplinary			Formulate and answer questions by interpreting
Learning Activities (76-			and analyzing displays of data, including double
79)	AZ	MA.4.2.1.PO 2	bar graphs, single line graphs, or circle graphs.
			3 - 1 - 3 - 1
Flight: Interdisciplinary			
Learning Activities (76-			
79)	AZ	MA.4.4.PO 1	Compute elapsed time to the minute.
			Collect, record, organize, and display data using
Making Time Fly (80-	A 7	MA 4 0 4 DO 4	double bar graphs, single line graphs, or circle
86)	AZ	MA.4.2.1.PO 1	graphs.
Where is North? The			Formulate and answer questions by interpreting
Compass Can Tell Us			and analyzing displays of data, including double
(87-90)	AZ	MA.4.2.1.PO 2	bar graphs, single line graphs, or circle graphs.
Plan to Fly There (97-			3 - 1 - 3 - 1
106)	AZ	MA.4.4.4.PO 1	Compute elapsed time to the minute.
Ma Oan Eliy Vayaand			
We Can Fly, You and I: Interdisciplinary			Formulate and answer questions by interpreting
Learning (107-108)	AZ	MA.4.2.1.PO 2	and analyzing displays of data, including double bar graphs, single line graphs, or circle graphs.
We Can Fly, You and	NZ	IVIA.4.2.1.1 O Z	bai graphs, single line graphs, or circle graphs.
I: Interdisciplinary			
Learning (107-108)	AZ	MA.4.4.PO 1	Compute elapsed time to the minute.
We Can Fly, You and			Make and test conjectures based on data (or
I: Interdisciplinary			information) collected from explorations and
Learning (107-108)	AZ	MA.4.5.2.PO 8	experiments.
			Collect, record, organize, and display data using
Dunked Napkin (17-	. 7	NAA 4 0 4 D0 4	double bar graphs, single line graphs, or circle
22)	AZ	MA.4.2.1.PO 1	graphs.
			Formulate and answer questions by interpreting
Dunked Napkin (17-			and analyzing displays of data, including double
22)	AZ	MA.4.2.1.PO 2	bar graphs, single line graphs, or circle graphs.
Dunked Napkin (17-	_		Identify the change in a quantity over time and
22)	AZ	MA.4.3.4.PO 1	make simple predictions.
			Make and test conjectures based on data (or
Dunked Napkin (17-			information) collected from explorations and
22)	AZ	MA.4.5.2.PO 8	experiments.
B B 14 1 (65			Recognize which attributes (such as shape or
Paper Bag Mask (23-	A 7	MA 4 4 4 DO 4	area) change and which do not change when 2-
28)	AZ	MA.4.4.1.PO 4	dimensional figures are cut up or rearranged.

Paper Bag Mask (23-			Construct geometric figures with vertices at
28)	AZ	MA.4.4.3.PO 3	points on the coordinate plane.
Paper Bag Mask (23-			Apply measurement skills to measure length,
28)	AZ	MA.4.4.PO 2	mass, and capacity using metric units.
			Describe the change in perimeter or area when
Paper Bag Mask (23-			one attribute (length or width) of a rectangle
28)	AZ	MA.4.4.4.PO 5	changes.
			Collect, record, organize, and display data using
Wind in Your Socks)			double bar graphs, single line graphs, or circle
(29-35)	AZ	MA.4.2.1.PO 1	graphs.
			Formulate and answer questions by interpreting
Wind in Your Socks)			and analyzing displays of data, including double
(29-35)	AZ	MA.4.2.1.PO 2	bar graphs, single line graphs, or circle graphs.
Wind in Your Socks)			Apply measurement skills to measure length,
(29-35)	AZ	MA.4.4.PO 2	mass, and capacity using metric units.
			Describe the change in perimeter or area when
Wind in Your Socks)			one attribute (length or width) of a rectangle
(29-35)	AZ	MA.4.4.PO 5	changes.
,			Analyze and evaluate whether a solution is
Wind in Your Socks)			reasonable, is mathematically correct, and
(29-35)	AZ	MA.4.5.2.PO 7	answers the question.
			Formulate and answer questions by interpreting
			and analyzing displays of data, including double
Right Flight (52-59)	AZ	MA.4.2.1.PO 2	bar graphs, single line graphs, or circle graphs.
			graphic, or shoto graphic.
			Formulate and answer questions by interpreting
Delta Wing Glider (60-			and analyzing displays of data, including double
68)	AZ	MA.4.2.1.PO 2	bar graphs, single line graphs, or circle graphs.
00,	, · ·	IVI/ 1.7.2.1.1 O Z	par graphs, origin into graphs, or orioto graphs.